TWO SHADES OF GRAY?

You need:
This picture
A pencil

What to Do
Rest a pencil horizontally on the line that goes from X to Y in the illustration, and show it to your friends. They’ll swear that the part of the gray rectangle below the pencil is a trifle darker than the part above the pencil. Remove the pencil to show that the gray looks exactly the same throughout the rectangle.

Why does it work?
Your eyes cannot see the subtle variation in shades of gray until a pencil marks a spot midway between the two grades.